

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,372	11/20/2006	Masataka Fukuda	12400-071	9832
757 7590 02/03/2009 BRINKS HOFER GILSON & LIONE P.O. BOX 10395			EXAMINER	
			COKER, ROBERT A	
CHICAGO, IL 60610			ART UNIT	PAPER NUMBER
			3616	
			MAIL DATE	DELIVERY MODE
			02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/577.372 FUKUDA ET AL. Office Action Summary Examiner Art Unit ROBERT A. COKER 3616 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 10/06/2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 3.5.6.8.9 and 11-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 3.5.6.8.9 and 11-17 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Attachment(s)

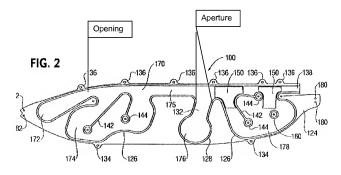
4) Interview Summary (PTO-413) Paper No(s)/Mail Date.

Art Unit: 3616

### DETAILED ACTION

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 3, 5, 6, 8, 9, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heudorfer et al. (U. S. 6,394,487) in view of Hammer et al. (U. S. 6,343,811).



(Figure 2 is rotated 90 degrees in the clockwise direction)

Art Unit: 3616

With respect to claim 3, 6, 9 and 11, Heudorfer et al. disclose a side curtain air bag (100), which includes chambers (172, 174, 176, 178) expanded by gas supplied from a gas generator (12), and expands and develops into a curtain shape along a side part of a vehicle so as to protect vehicle occupants, the side curtain air bag comprising: at least one primary chamber (174,176, 178) (Column 5, lines 43-46) respectively defining an aperture (wherein the aperture is the portion labeled in the drawing where the gas from the gas generator flows through into chamber 176) (See Figure 2 above) that provides fluid communication between the primary chamber and the gas generator, the primary chamber being expandable by gas supplied by the gas generator so as to protect an occupant; at least one secondary chamber (172) defining an opening (wherein the opening is the portion labeled in the drawing forming entrance for the gas from the gas generator into the chamber 172) (See Figure 2 above) that provides fluid communication between the secondary chamber and the gas generator, the aperture and the opening sized such that the aperture is substantially larger than the opening so that the secondary chamber begins to substantially expand and develop after the primary chamber is approximately fully expanded and developed by gas from the gas generator; and relative to when the gas is generated by the gas generator high pressure is applied initially to the primary chamber, whereas the secondary chamber gradually increases in pressure to be about the same as pressure of the primary chamber. Heudorfer et al. do not disclose at least two tethers. However, Hammer et al. disclose a first (31) and a second (33) curtain tethers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

Art Unit: 3616

modify the invention of Heudorfer et al., such that it comprised at least two tethers in view of the teachings of Hammer et al., so as to keep the curtain taut against the windows of the vehicle.

With respect to claims 5 and 8, the combination discloses the side curtain air bag, wherein the opening of the secondary chamber is in the fluid communication with the primary chamber, the secondary chamber being expanded by an inflow of the gas from the primary chamber.

With respect to claim 12, 13 and 14, the combination discloses the side curtain air bag, wherein pressure in the primary chamber has reached a maximum value before the secondary chamber begins to substantially expand and develop and the primary chamber continuously decreases in pressure as the secondary chamber expands and develops.

With respect to claims 15, 16 and 17, the combination discloses the claimed invention, except for the pressure of the secondary chamber to gradually increase to about the same as the pressure in the primary chamber by about 4 seconds. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the secondary chamber to gradually increase to the same pressure as the primary as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. (In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Art Unit: 3616

#### Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment of claims 3, 6 and 9

#### Conclusion

 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT A. COKER whose telephone number is (571)272-8514. The examiner can normally be reached on Monday thru Friday, 8.30 a.m.-5:00 p.m.

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on 571-272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/ Supervisory Patent Examiner, Art Unit 3616 Robert A Coker Examiner Art Unit 3616

RAC